

MINNESOTA STATE CAPITOL PHASING/SCHEDULE

The 2001 Predesign Study considered funding allocation by wings and in the typical Bonding Bill schedules. This process assumes funding every two years for a wing of construction, although a wing itself may take less than two years to complete construction work. Further discussions and reviews of this approach have uncovered some concerns:

- Ability to receive full financing request in a Bonding Bill Session
- Perception of the Capitol being a local St. Paul project or that funding for it replaces other St. Paul project funding.
- Regular and timely funding for each construction phase.
- Maintaining consistent project construction team on site.
- Controlling construction costs through entire project duration.
- Implementing an effective “project plan” through the project duration.
- Leveraging early buy out of multiple project items (HVAC units, lighting, stone, etc.) and establishing price guarantees for materials.

The 2006 Predesign Study Update has considered a variety of construction phasing options, as they relate to schedule and cost planning. The cost of construction escalation is one event that can not be controlled, in that it is driven by world economy conditions, material shortages, and the U.S. economy. But escalation can be mitigated by reviewing scheduling options that try to condense the construction schedule, maximize early buy-out potential, work to maintain a consistent project team and schedule, and try to plan large scope construction phases early in the process.

Looking to the construction schedule for ways to reduce the “non-construction costs” of a project, can allow the project to maximize the programmatic aspects and create the greatest value for the dollar. As we analyze the construction schedule options, we must consider the following factors that influence the decision making:

- Timing of Legislative Funding
- Predictability of Funding Amounts
- Building Occupants Re-location
- Legislative Session Functional Requirements
- Visitor and Tenant Safety
- Building Exiting and Life Safety Systems
- Project Delivery Methods

The Design Team is recommending the Capitol Restoration be delivered via a “Construction Manager at Risk” delivery method. This will allow the Construction Manager to work as a member of the design team to help establish the optimum process for project phasing, to establish a Guaranteed Maximum Price (GMP) for the work, and help to minimize the overall risk to the State and Tenants. The Use of a Construction Manager for this unique project, would provide the advantage of a consistent Contractor for the duration of the project (7 years), help with early buy-out of large cost items, and allow construction work to be accelerated when opportunities arise.

RECOMMENDATIONS

The following are the 2006 Predesign Update recommendations for project funding and construction sequencing organized to minimize project risk factors and maximize project value.

Recommendation 1:

Secure a Construction Manager for this work and require a Guaranteed Maximum Cost for the Project. This will help to ensure the cost of this project over the long term of construction.

Recommendation 2:

The Construction Manager is brought on to the design team early on to assist in development of the project scheduling and methodology.

Recommendation 3:

The project construction occur in 2 steps with the expansion space first and then combining 2 wings at a time to reduce the length of the construction schedule and the associated costs.

Recommendation 4:

The Legislature considers funding the project in Off Bonding Bill years, so as not to involve this critical Legacy project in the typical Bonding process.

Recommendation 5:

Allocation of the funding is considered in two portions and not per construction phase. This will allow the construction process to move forward consistently without waiting for each phase's funding to be available. A 2 step funding process is more effective than a 3 step funding, in that the funding is secure and work is predictable, it allows for early procurement and purchasing of key building materials and ensures the project team remains intact. This will encourage the construction process be efficiently managed and operated to complete the process as quickly as possible.

- **Step 1:** The Expansion Space and early material pre-purchasing.
- **Step 2:** The Existing Building Restoration, which is to be restored in two wings at a time (East and North Wing) and (West Wing and Rotunda.)

Recommendation 6:

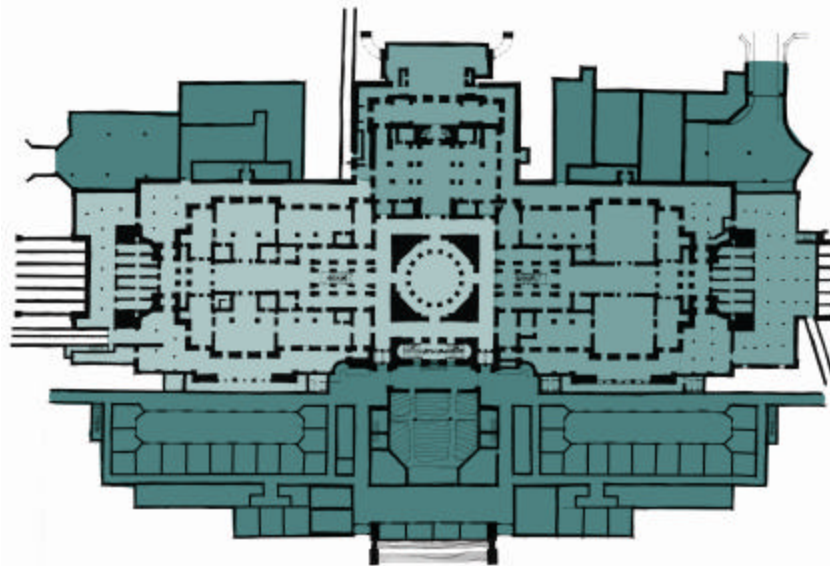
The initial funding allocation is to occur in the 2007 Legislative Session. This would then allow the construction documentation to be completed in 2007 and the first phase of construction activity to begin early 2008. This recommended approach would provide a fully restored Capitol Building at the end of 2014/early 2015.



Option A:

- Option A is the design team recommended approach. This option recommends combining funding into 2 allocations and also accelerates construction activity by combining two wings of the existing Capitol Building at one time. This option anticipates completion in December 2014. This option is the most cost effective option relative to schedule and phasing in that it completes the work in the shortest time period, considering the political realities of bonding and cost allocation.

B	Funding Allocation
	Construction Documentation
	Construction Administration



Phasing Plan A

Key:

- Phase 3
- Phase 2
- Phase 1

PHASING PLANS

Option B:

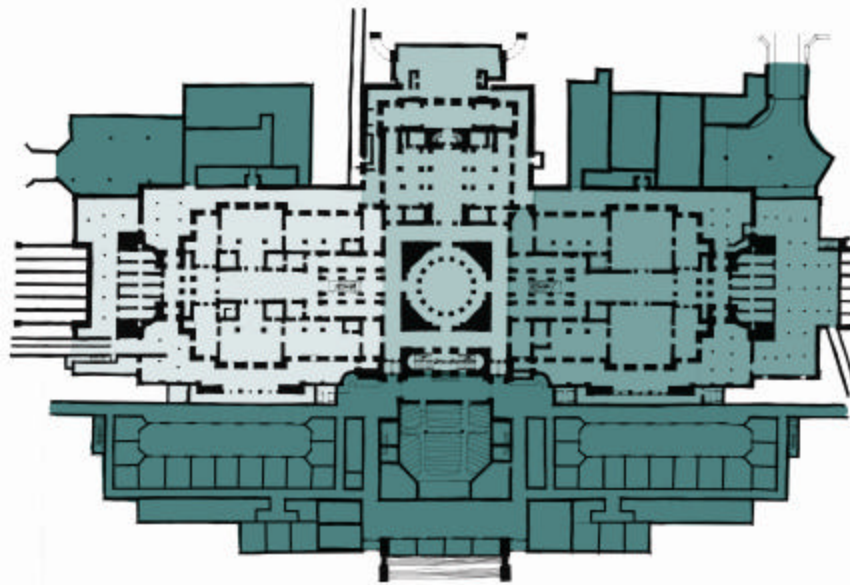


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Option C:

- Option C is based on the 2001 Pres-design scenario, but looks for funding in the non Bonding Bill Sessions. This option provides more continuous construction activity, but shows an anticipated completion in December 2016. This schedule/phasing option is completed 2.5 year later than Option A – this results in an approximate 23% increase in construction costs.

OPTION C		2006 Construction by Wing Option with Funding on off Bonding Sessions (4 or 5)											
10 Years	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
DOCUMENTATION													
STEP ONE													
STEP TWO													
STEP THREE													
STEP FOUR													
STEP FIVE													



Phasing Plan C

Key:

- Phase 5
- Phase 4
- Phase 3
- Phase 2
- Phase 1

PHASING PLANS

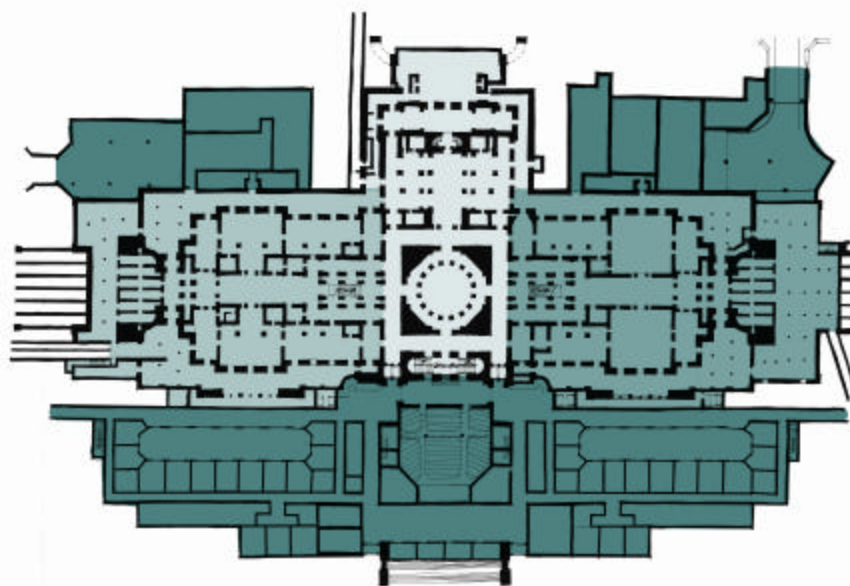


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Option D:

- Option D is a modification of Option A in that the funding allocations are spread out by wing/phase. The anticipated completion of this option is April 2015. This option also increases the schedule by approximately 2 years, increasing the overall cost of construction by 15.5%.

OPTION D		2006 Construction by Wing Option with Funding on off Bonding Sessions (4)																																
8.5 Years	2007				2008	B			2009				2010	B			2011				2012	B			2013				2014	B			2015	
DOCUMENTATION																																		
STEP ONE																																		
STEP TWO																																		
STEP THREE																																		
STEP FOUR																																		



Phasing Plan D

Key:

- Phase 4
- Phase 3
- Phase 2
- Phase 1

PHASING PLANS